





### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patient and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

21186

7590

12/12/2002

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402 EXAMINER

MEIER, STEPHEN D

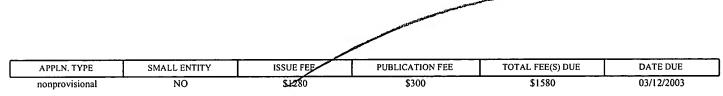
-ART UNIFF- CLASS-SUBCLASS

2822 257-315000

DATE MAILED: 12/12/2002

-		50 D.G D.MC	CIDOTALA VED DIVENTOD	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/043,065	01/09/2002	Leonard Forbes	303.684US3	5328

TITLE OF INVENTION: P-CHANNEL DYNAMIC FLASH MEMORY CELLS WITH ULTRATHIN TUNNEL OXIDES



THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
  - Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.





# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE Commissioner for Patents

Washington, D.C. 20231

Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as

indicated unless corrected be maintenance fee notification		e in Block 1, by (a) sp	ecifying a new c	orrespondence addre	ess; and/or (b) indicating a sepa	arate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)  21186 7590 12/12/2002  SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other		
				accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.		
P.O. BOX 2938	LUNDBERG, WUI	essner & Klu	IH, P.A.			_
MINNEAPOLIS, N	AN 55402			I hereby certify United States Pos envelope addresse transmitted to the	Certificate of Mailing or Trans that this Fee(s) Transmittal is tal Service with sufficient postaged to the Box Issue Fee address USPTO, on the date indicated b	being deposited with the ge for first class mail in an above, or being facsimile elow.
						(Depositor's name
						(Signature
						(Date
APPLICATION NO.	FILING DATE	FIRS	ST NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,065	01/09/2002	<b></b>	Leonard Forbes		303.684US3	5328
TITLE OF INVENTION: P-	CHANNEL DYNAMIC F	LASH MEMORY CEL	LS WITH ULTR	ATHIN TUNNEL (	OXIDES	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBL	ICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280		\$300	\$1580	03/12/2003
EXAMIN	JER T	ART UNIT	CLASS-SUBC	ASS		
MEIER, STE		2822	257-31500			
1. Change of correspondence	ce address or indication of	'Fee Address" (37	2. For printing	on the patent front	t page, list (1)	
CFR 1.363).				p to 3 registered pa alternatively, (2) the		
☐ Change of corresponde Address form PTO/SB/12	nce address (or Change of (22) attached.	Correspondence	single firm (ha	iving as a member	r a registered	
☐ "Fee Address" indication PTO/SB/47; Rev 03-02 on Number is required.	attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
3. ASSIGNEE NAME AND	RESIDENCE DATA TO E	BE PRINTED ON THE	PATENT (print of	or type)		
PLEASE NOTE: Unless ar been previously submitted to (A) NAME OF ASSIGNEE				patent. Inclusion of on of this form is NC Y and STATE OR C	assignee data is only appropriat DT a substitute for filing an assig COUNTRY)	e when an assignment has nment.
Please check the appropriate	assignee category or catego	ories (will not be printed	d on the natent)		corporation or other private g	roup entity 🔲 governmen
4a. The following fee(s) are of		<u></u>	ment of Fee(s):			
☐ Issue Fee		🗅 A ch	eck in the amoun	t of the fee(s) is encl	losed.	
☐ Publication Fee		•	•	d. Form PTO-2038		
☐ Advance Order - # of Co	opies	☐ The Deposi	Commissioner is t Account Number	hereby authorized by	y charge the required fee(s), or c (enclose an extra copy of this	redit any overpayment, to form).
Commissioner for Patents is	requested to apply the Issue	Fee and Publication Fe	ee (if any) or to re	-apply any previous	sly paid issue fee to the applicati	on identified above.
(Authorized Signature)	· · · · · · · · · · · · · · · · · · ·	(Date)				
NOTE; The Issue Fee and other than the applicant; a interest as shown by the rec	Publication Fee (if require registered attorney or age ords of the United States P.	ed) will not be accept ent; or the assignee o atent and Trademark O	ed from anyone other party in ffice.			
This collection of informat obtain or retain a benefit the application. Confidentiality estimated to take 12 minute completed application form case. Any comments on a suggestions for reducing the Patent and Trademark Office.	tion is required by 37 CFR by the public which is to form is governed by 35 U.S.C. es to complete, including gone to the USPTO. Time with the amount of time you have been used to co. U.S. Department of COMPLETED FORMS	122 and 37 CFR 1.14. 1 athering, preparing, and Il vary depending upo require to complete the	This collection is d submitting the n the individual his form and/or			

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Commissioner for Patents, Washington, DC 20231.



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspito.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/043,065	01/09/2002	Leonard Forbes	303.684US3	5328		
21186	7590 12/12/2002		EXAMIN	ER		
SCHWEGMA	CHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			MEIER, STEPHEN D		
P.O. BOX 2938 MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER		
MINNEAPOLIS	5, MIN 33402		2822			
			ATE MAILED: 12/12/2002			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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Addross: COMMISSIONER OF PATENTS AND TRADEMARKS
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR .	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,065	01/09/2002	Leonard Forbes	303.684US3	5328
. 21186	7590 12/12/2002		EXAMIN	ER
	N, LUNDBERG, WOES	MEIER, STEPHEN D		
P.O. BOX 2938 MINNEAPOLIS	. MN 55402		ART UNIT	PAPER NUMBER
UNITED STATE			2822	
			DATE MAILED: 12/12/2002	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

		Application N .	Applicant(s)	
		10/043,065	FORBES, LEONARD ,	
	Notice of Allowability	Examin r	Art Unit	$\mathcal{I}$
		Stephen D. Meier	2822	
		Stephen D. Weler	2022	
All claims be herewith (or NOTICE OF	- The MAILING DATE of this communication appeing allowable, PROSECUTION ON THE MERITS IS previously mailed), a Notice of Allowance (PTOL-85; ALLOWABILITY IS NOT A GRANT OF PATENT R or upon petition by the applicant. See 37 CFR 1.31;	(OR REMAINS) CLOSED in this ap or other appropriate communication IGHTS. This application is subject to	plication. If not included n will be mailed in due course. <b>T</b>	ΓHIS nitiative
1. 🕅 This	communication is responsive to communication of 1-	9-02.		
	allowed claim(s) is/are <u>1-32</u> .	<del></del>		
	drawings filed on <u>09 January 2002</u> are accepted by th	ne Examiner.		
<b>4</b> .	owledgment is made of a claim for foreign priority un │ All   b)	der 35 U.S.C. § 119(a)-(d) or (f).		
	1. Certified copies of the priority documents have	e been received.		
	2. Certified copies of the priority documents have	e been received in Application No	·	
	3.  Copies of the certified copies of the priority do	cuments have been received in this	national stage application from	the
	International Bureau (PCT Rule 17.2(a)).			9
* Cerl	tified copies not received:			
5. 🗌 Ackno	owledgment is made of a claim for domestic priority u	nder 35 U.S.C. § 119(e) (to a provis	ional application).	
	The translation of the foreign language provisional			
6. 🗌 Ackno	owledgment is made of a claim for domestic priority u	nder 35 U.S.C. §§ 120 and/or 121.		
below. Failu 7.	s THREE MONTHS FROM THE "MAILING DATE" o ire to timely comply will result in ABANDONMENT of BSTITUTE OATH OR DECLARATION must be subr PATENT APPLICATION (PTO-152) which gives reas	this application. THIS THREE-MO nitted. Note the attached EXAMINE	NTH PERIOD IS NOT EXTEND  R'S AMENDMENT or NOTICE O	DABLE.
• [] con	DECTED DRAWINGS would be submitted			
	RECTED DRAWINGS must be submitted. ncluding changes required by the Notice of Draftspel	son's Patent Drawing Review ( PTC	)-948) attached	
(a) L	1) ☐ hereto or 2) ☐ to Paper No	3011 31 atom Brawing Noview (1 10	o to factuality	~
(b) □ i	ncluding changes required by the proposed drawing	correction filed which has h	neen approved by the Examiner.	
	ncluding changes required by the proposed drawing ncluding changes required by the attached Examine	-		
(0) 🗀 '	nordaling changes required by the attached Examine	3 Amenament 7 Comment of in the	omee denote of the upon tro.	<del></del> '
ldentifyin of each s	g indicia such as the application number (see 37 CFR 1 heet. The drawings should be filed as a separate pape	.84(c)) should be written on the drawi with a transmittal letter addressed to	ngs in the top margin (not the ba the Official Draftsperson.	ck)
	OSIT OF and/or INFORMATION about the depondence of the comment regarding REQUIREMENT FOR T			
Attachment	r(s)			
1⊠ Notice o	of References Cited (PTO-892)	2 ☐ Notice of Inform	nal Patent Application (PTO-152	<u>'</u> )
3 ☐ Notice of	of Draftperson's Patent Drawing Review (PTO-948)		nary (PTO-413), Paper No	. •
	tion Disclosure Statements (PTO-1449), Paper No. 2			20
	er's Comment Regarding Requirement for Deposit gical Material	8∐ Examiners Stat 9∐ Other .	rement of Reasons for Allowanc	_
			Stephen D. Meier Primary Examiner	
	•			